

## **Module One**

### Introduction to Business Intelligence

- Definitions and Concepts
  - BI Defined
  - DW Defined
  - BI Applications
  - Data Stores
- Business Intelligence Frameworks
  - BI Components Framework
  - BI Technology Framework
  - BI Organizational Framework

## **Module Two**

### Business Application Fundamentals

- Business Requirements for BI
  - Business Context – Drivers, Goals, and Strategies
  - Strategic vs. Tactical BI
- Business Value
  - Business Valuation Models
  - Business Solutions
- Business Impact
  - Information Impacts
  - Organizational Impacts
- Business Applications
  - BI Information Services
- Business Analytics
  - Business Metrics and Business Management
  - Performance Dashboard for Information Delivery
  - Scorecards for Information Delivery
  - Analytic Applications for Information Delivery

## **Module Three**

### BI & DW Architectures & Processes

- Warehousing Definitions
  - Data Warehousing Defined
- Warehousing Data Stores
  - Roles of Data Stores
  - Data Warehouse
  - Data Mart
  - Staging Area
  - Operational Data Store (ODS)
  - Data Sources
- Data Warehousing Architectures
  - Hub vs. Bus Architecture
  - Independent Data Marts
  - Conformed Data Marts
  - Collectively Architected Data Marts
  - Data Warehouse with Dependent Data Marts
  - Persistent Staging without Data Warehouse
  - Persistent Staging and the Data Warehouse
  - Positioning the ODS
- Data Warehousing Processes
  - Data Capture

- Data Transformation
- Data Cleansing
- Loading the Data Warehouse and Populating Data Marts
- Business Intelligence Processes
  - Data Access and Information Delivery
  - Data Mining and Applied Analytics

## Module Four

### BI Infrastructure

- BI Infrastructure Components
  - Processes, Technology, and People
- BI Processes
  - Program Management
    - Aligning Multiple Projects and Activities
    - Business Alignment
  - Change Management
    - Causes of Change
    - Change Management Issues
    - Change Management Practices
  - Quality Management
  - Data Governance
    - Managing Data as a Business Resource
    - Data Ownership
    - Data Stewardship
    - Data Custodianship
  - Development Methodologies
    - Top-Down Methodologies
    - Bottom-Up Methodologies
    - Hybrid Methods
    - Incremental Development
  - Project Management
    - Balancing Results, Resources, and Time
    - Project Management and Methodology
  - Data Warehouse Administration
    - Regular Refresh
    - Managed Platforms
    - Managed Environment
    - Customer Service
  - Metadata Management
    - Kinds of Metadata
    - Metadata and Technology
    - Metadata Models and Standards
    - Metadata Challenges
    - Metadata Strategies
    - Metadata Responsibilities
- BI and DW Technology
  - Kinds of Technology
  - Technology and Methodology
  - Technology and BI/DW Processes
- BI Roles and Responsibilities
  - Who does the Work?
  - BI Organizations
- BI Readiness
  - Planning for Success

## Module Five

### Summary and Conclusions

- Common Mistakes
  - From TDWI's *10 Mistakes* Series
- BI/DW Best Practices
  - Positioning for Success
- References and Resources
  - Publications

## Appendices

### Appendix A – Additional Reading

- Total Cost of Ownership for BI and DW
- Ten Best Practices for Business Intelligence
- Order From Chaos: Stepping Up to the Metadata Mess
- Want To Increase the Use of Your Data Warehouse? Market it!
- What Are We Doing to Help the Data Steward?
- Measuring Effectiveness of Your Data Warehouse
- Is Your Data Warehouse Business Driven?

### Appendix B – Bibliography and References